

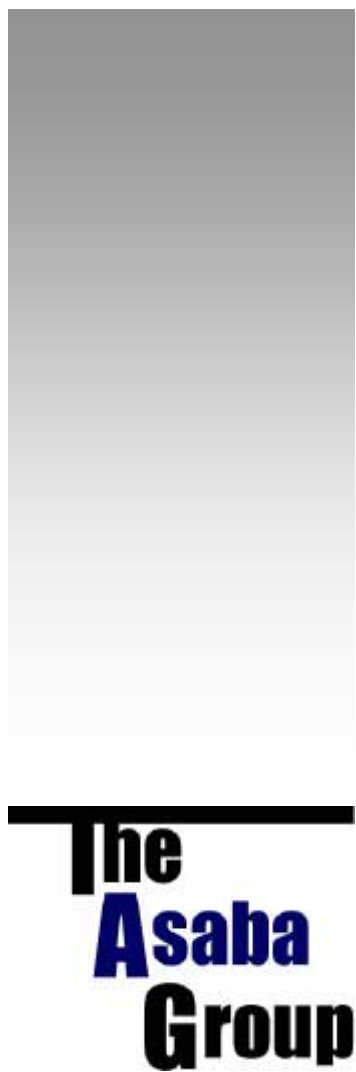
Project Definition

The Asaba Group was retained by the Minority Business Development Agency (MBDA)

OBJECTIVE

Develop a position paper that provides insights to creating larger minority-owned businesses in the automotive industry

- Competitive trends and issues
- State of minority sourcing
- New growth imperatives
- Growth strategies and new business structures



Content

STRATEGY AND BUSINESS IMPROVEMENT CONSULTING

Competitive Trends and Issues	3-11
State of Minority Sourcing	12-20
New Growth Imperatives	21-30
Growth Strategies and Business Structures	31-44
Appendix	45-47

Key Points: Competitive Trends and Issues

2

U.S. vehicle demand at peak of demand cycle

- Rising gas prices and interest rates dampening demand

U.S. domestic market increasingly competitive

- Increased competition from foreign manufacturers

Manufacturers evolving new customer focused value proposition

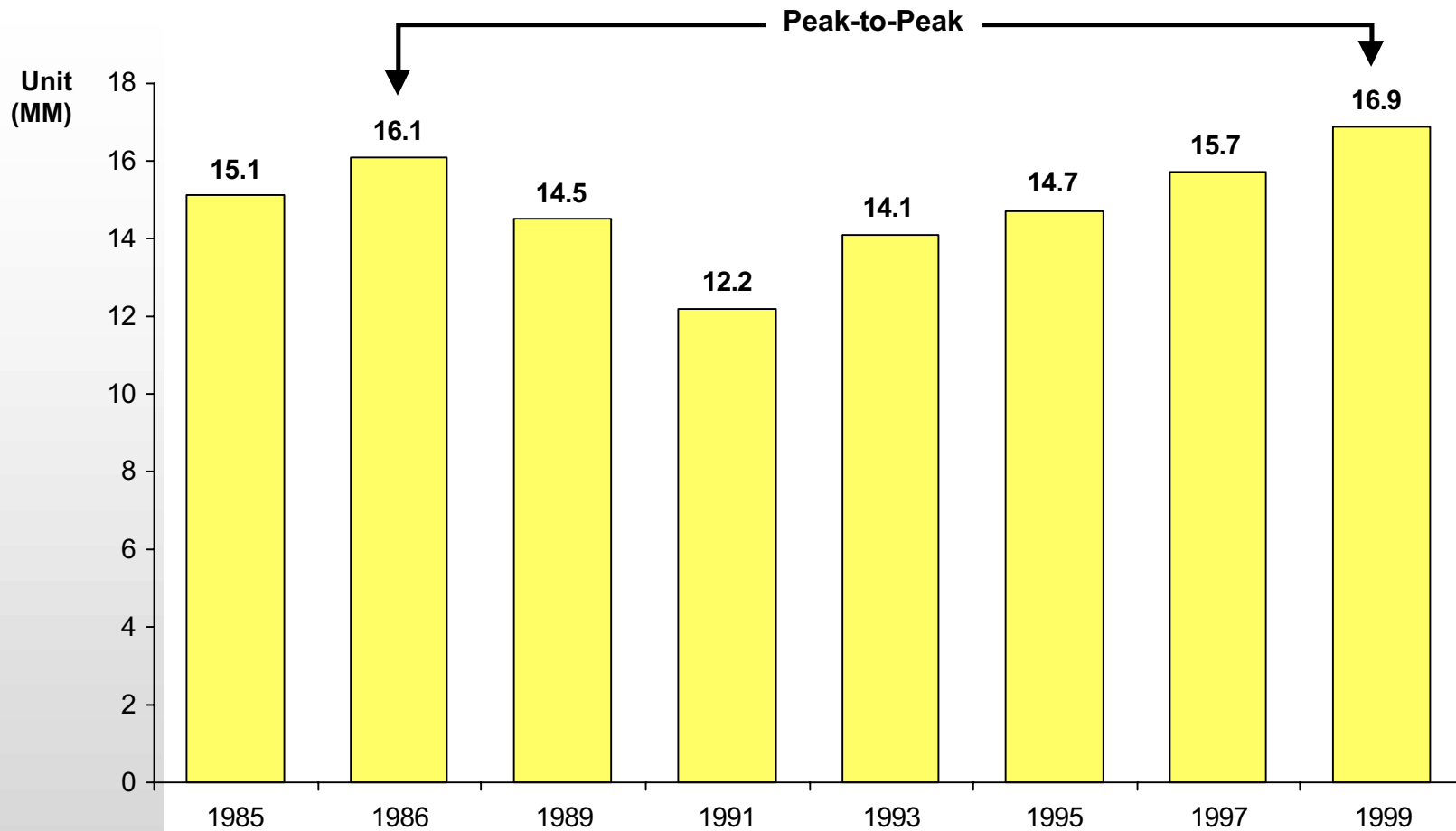
- Focusing on revenue streams throughout vehicle ownership
- Changing demographic profile of U.S. consumers

Automotive suppliers under extreme competitive pressures

- Cost competitiveness pressures from OEM
- Industry consolidation
- Value chain reconfigurations

U.S. Auto Industry Saw Record Sales in 1999

3

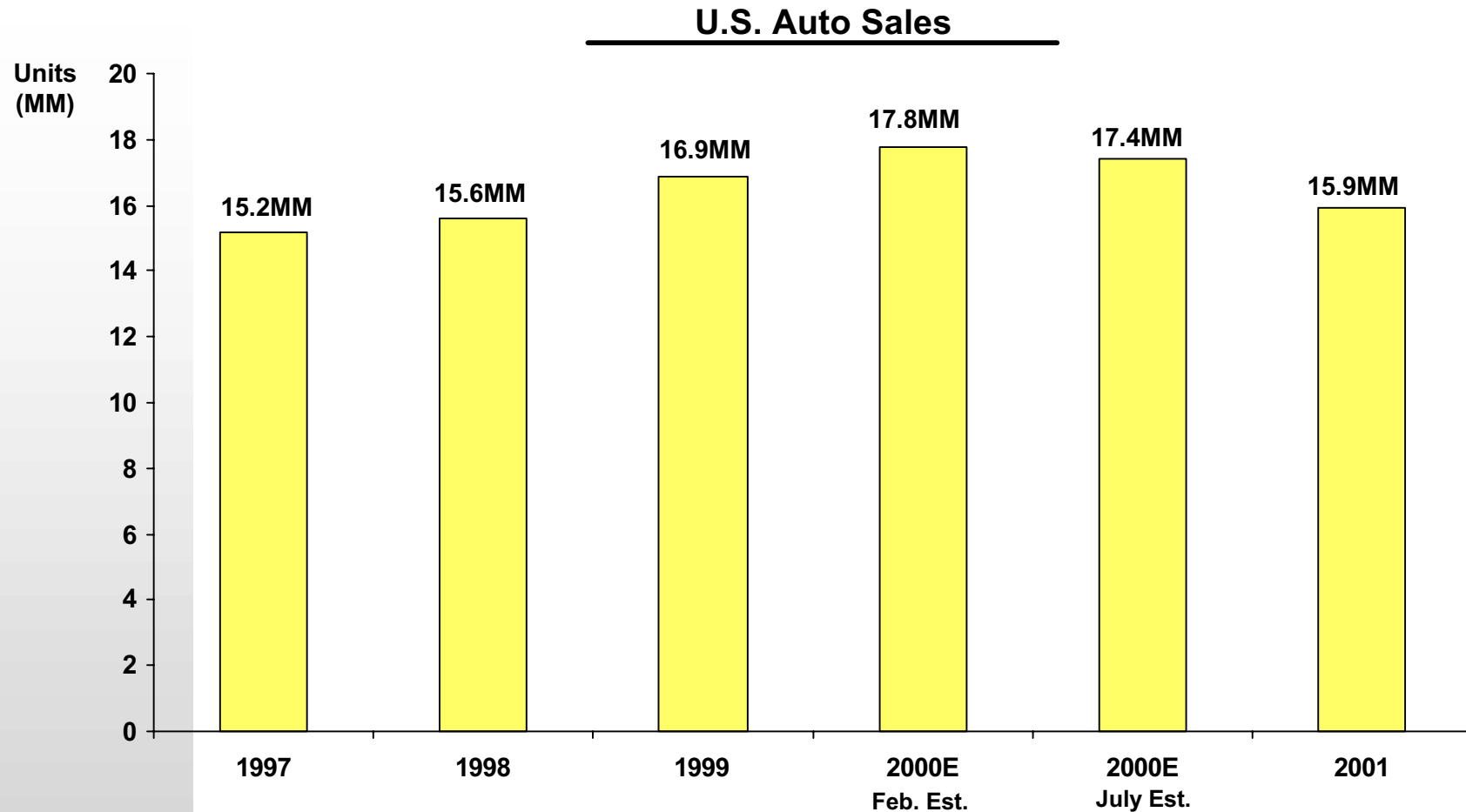


At Top of Demand Cycle

U.S. Automotive Sales Forecast Revised Downwards

Largely Driven by Rising Interest Rates and Gas Prices

4



Downside of Industry Cycle Will Impact Industry Profits And Growth

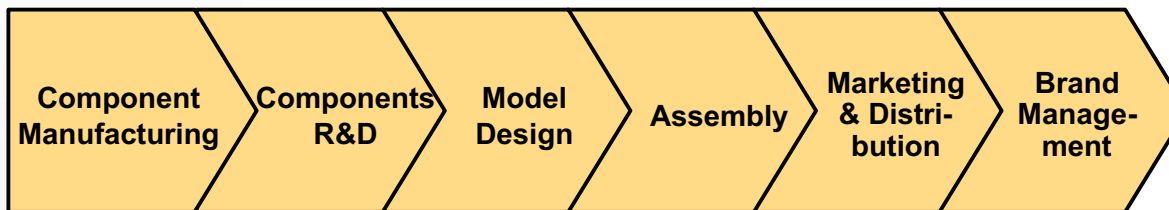
Auto Manufacturers Reshaping Their Value Proposition

Focus On Building Customer Brand Loyalty

5

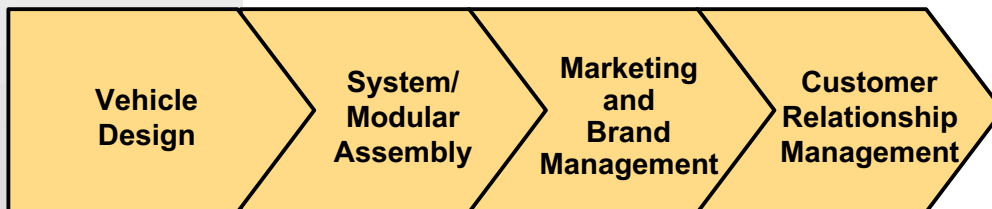
Focusing on marketing, distribution, vehicle design and integration

Yesterday



- Value proposition developed around product specific strategies
- Suppliers role was “Build to Print”

Future

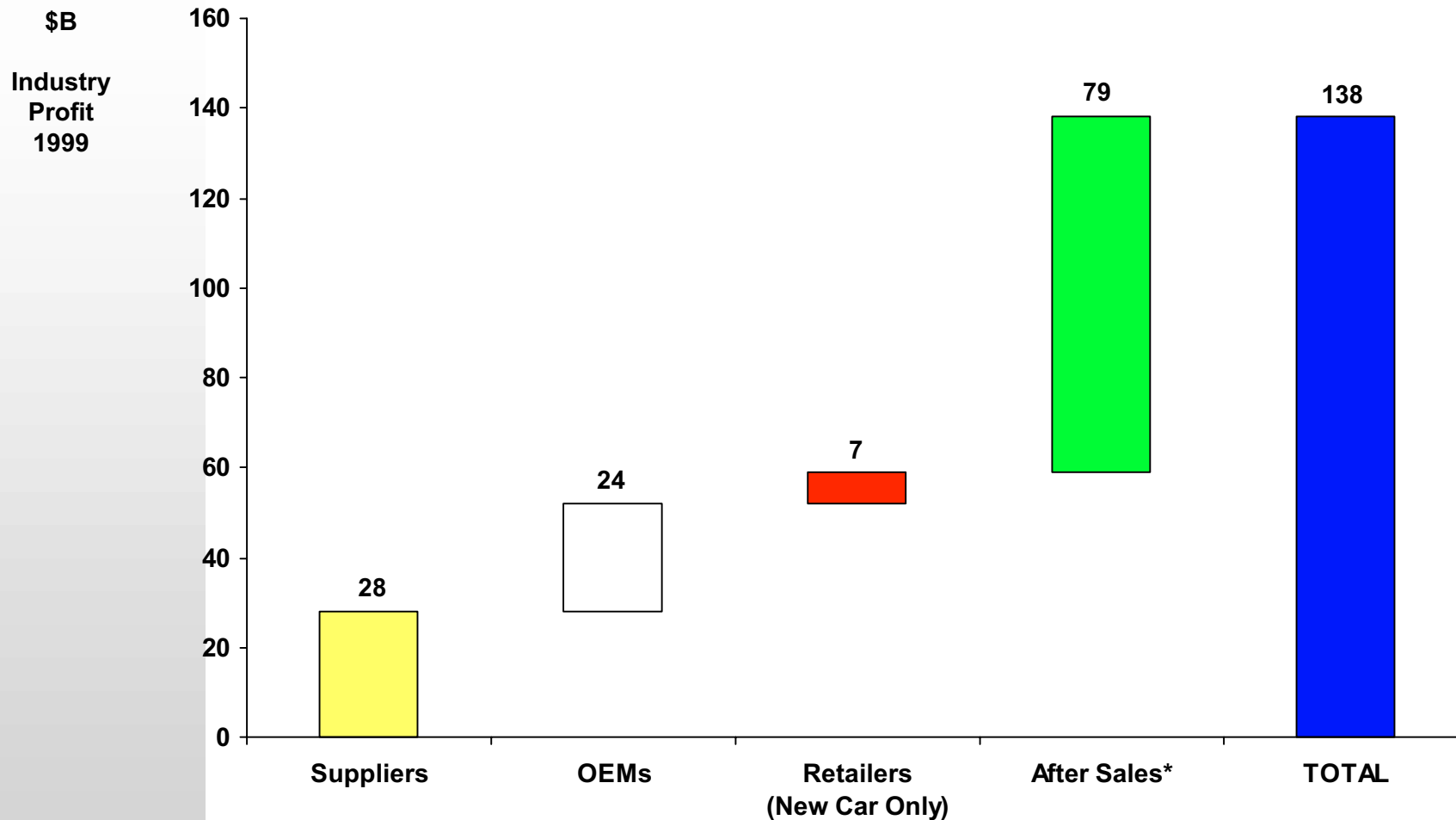


- Value proposition lies in brand management and control of customer life time value
- Increasing reliance on automotive suppliers to design, engineer and manufacture systems
- Brand management developed around consumer segments and lifestyles
- Leveraging consumer insights and participating in downstream profit pools

Control of End-Consumer Automotive Experience Is a Strategic Imperative

And Targeting Profit Pool In Downstream Revenue Sources

6



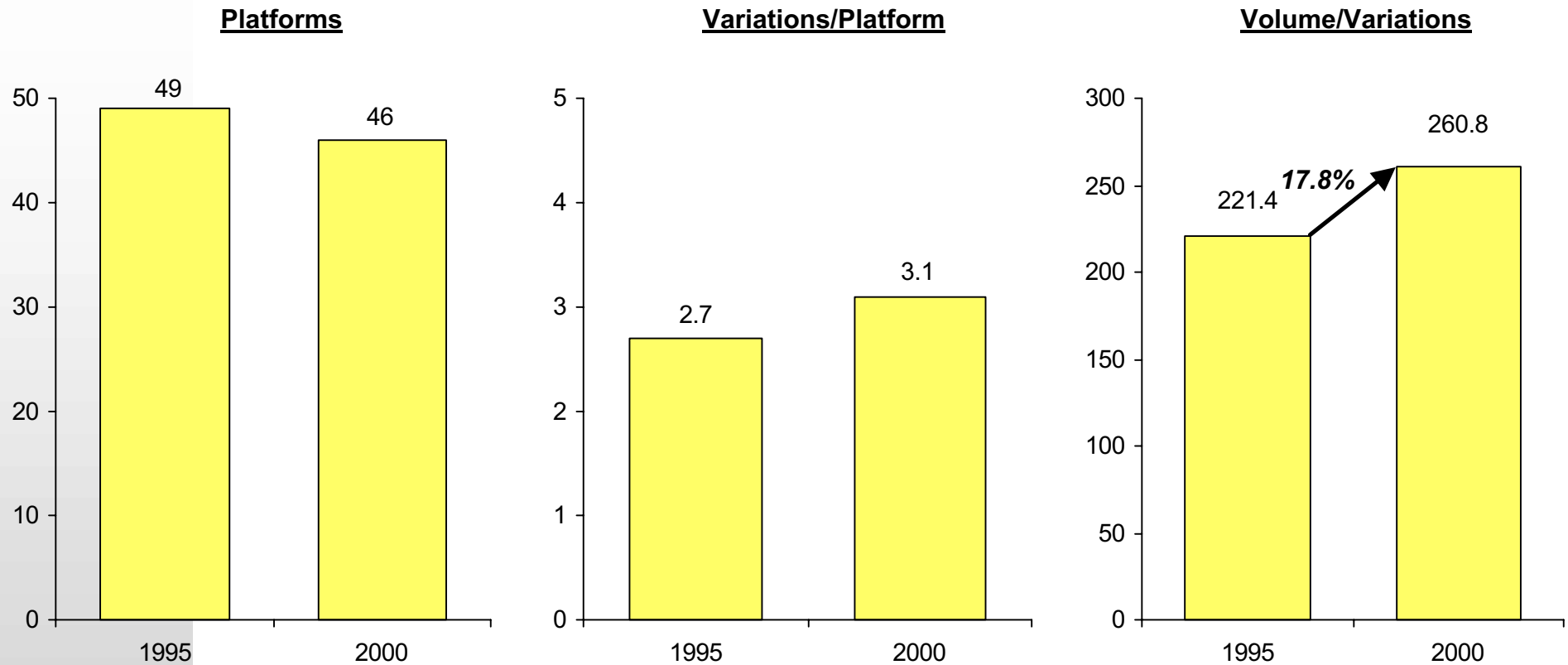
* Includes financial services, repair, maintenance, used cars and spare parts
SOURCE: McKinsey & Company analysis

Auto Manufacturers Driving Global Platform Consolidation

Leveraging Fixed Cost Infrastructure

7

Big Three North American Light Vehicle Platform Analysis

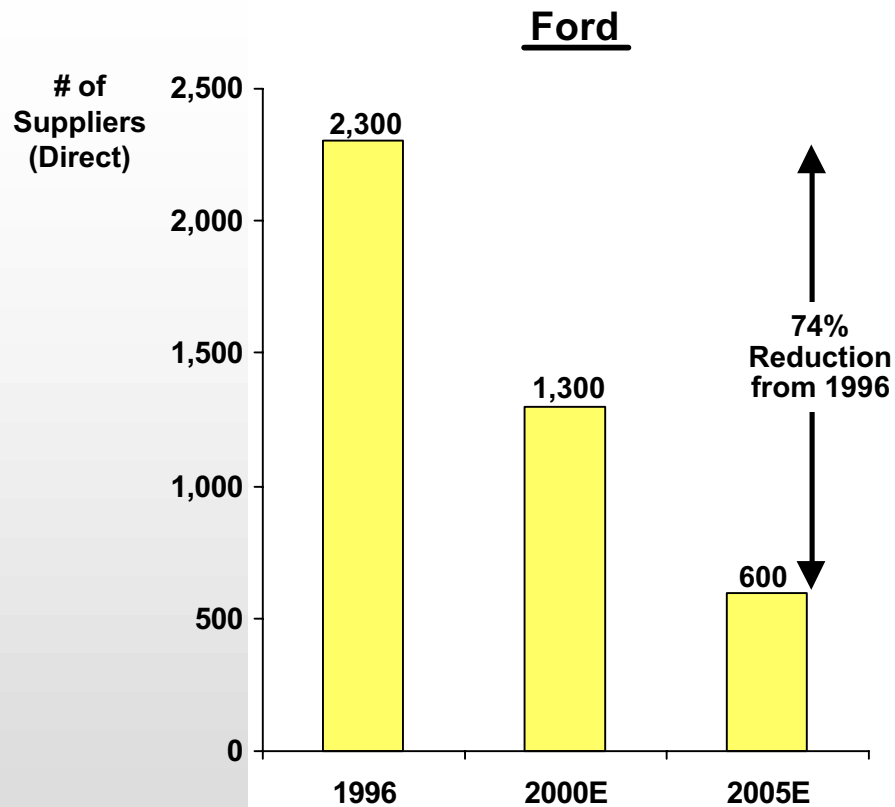


Drive Volume Increases on More Components

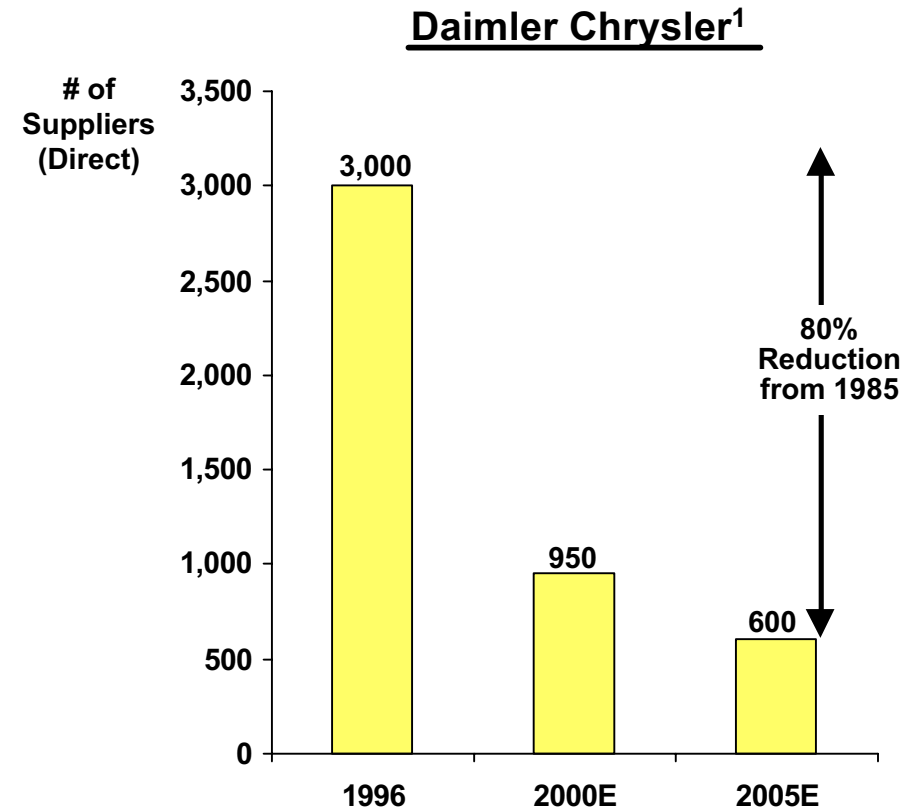
Auto Manufacturer Using Fewer Suppliers

Moving Design and Manufacturing Tasks to Fewer Suppliers

8



- 250 Tier I suppliers have 80% of \$50 billion parts purchase



- 150 Tier I suppliers with 90% of material purchase

Fewer Suppliers Now Responsible for Large Share of OEM Purchases

Automotive Suppliers Experiencing Several Competitive Pressures

Innovation/ Technology

OEMs depending on innovation to drive growth in mature markets
- Demanding suppliers to drive the innovation process

Supply Chain Management/ Rationalization

OEMs reducing Tier One suppliers selecting those with superior system integration and total solutions capabilities
- Global supply capabilities

Forced Price Reductions

OEMs demanding annual price reductions e.g. (5% annual reduction)
- Automotive suppliers increasing productivity and efficiencies

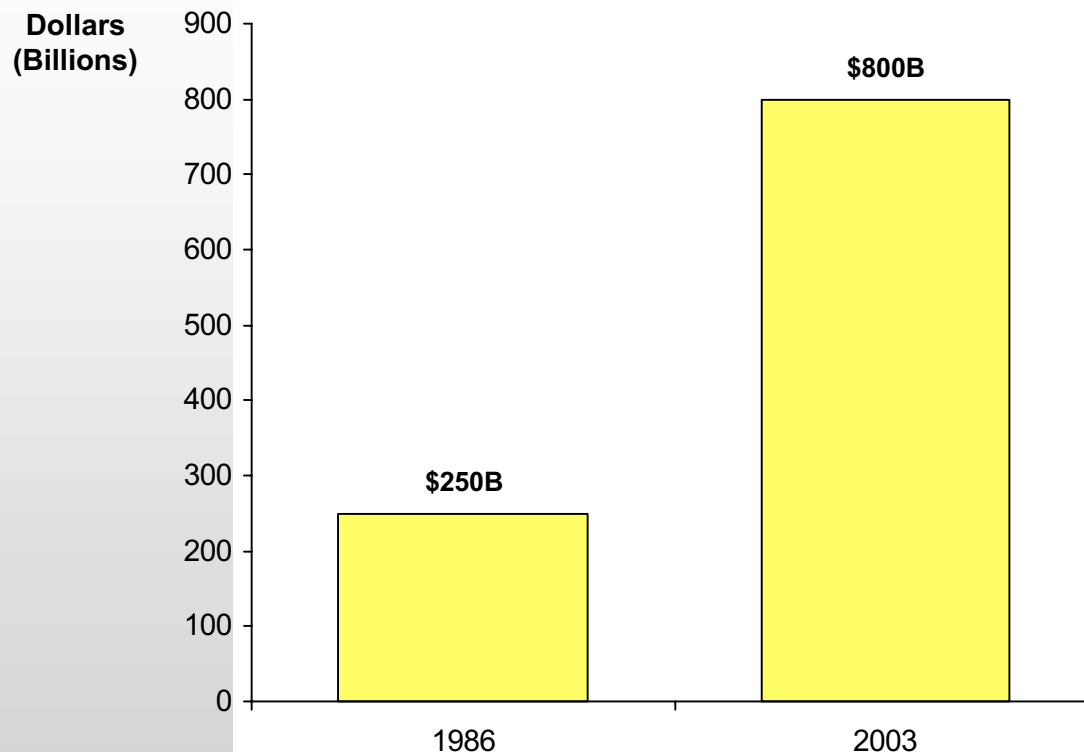
Globalization

OEMs off-loading design and supply chain coordination to suppliers
- Suppliers must learn to operate in multiple geographic locations simultaneously

Competitive Pressure Driving Supplier Consolidation

10

In 1986; 30,000 suppliers in a \$250 billion industry; by 2003, 5,000 suppliers in a \$800 billion industry



Consolidation Drivers

- The race to become system integrators
- Acquiring key capabilities
 - Technology
 - Manufacturing
 - Geographic reach
- Quest to achieve optimal economies of scale/critical mass

Fewer But Bigger Suppliers

Content

STRATEGY AND BUSINESS IMPROVEMENT CONSULTING

Competitive Trends and Issues 3-11

State of Minority Sourcing 12-20

New Growth Imperatives 21-30

Growth Strategies and Business Structures 31-44

Appendix 45-47

Key Points: State Of Minority Sourcing

12

Changing demographics driving new focus on the minority consumer

- Minorities fastest growing segment of entry level car buyers
- Forecasted to become a significant share of entry level car buyers

Auto Manufacturers view minority sourcing programs as strategic

- Minority sourcing spending levels have grown faster than industry unit sales

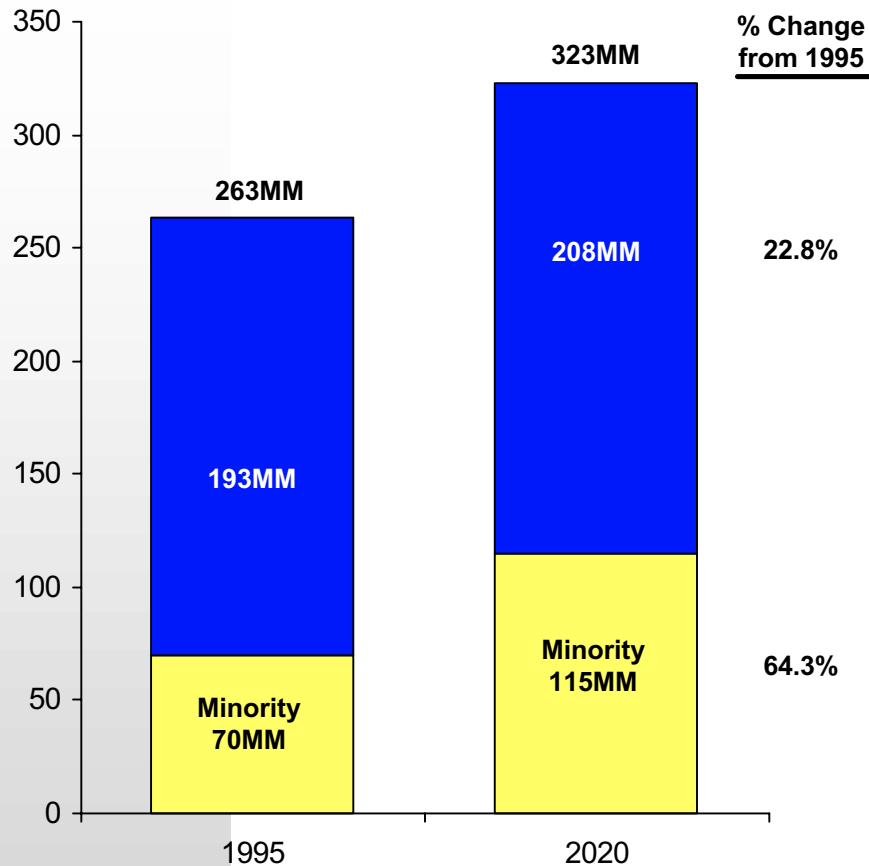
Minority sourcing by commodity category provides some insights

- Reflects the profile of available minority suppliers
- Concentrated in raw materials, material processing and non-production

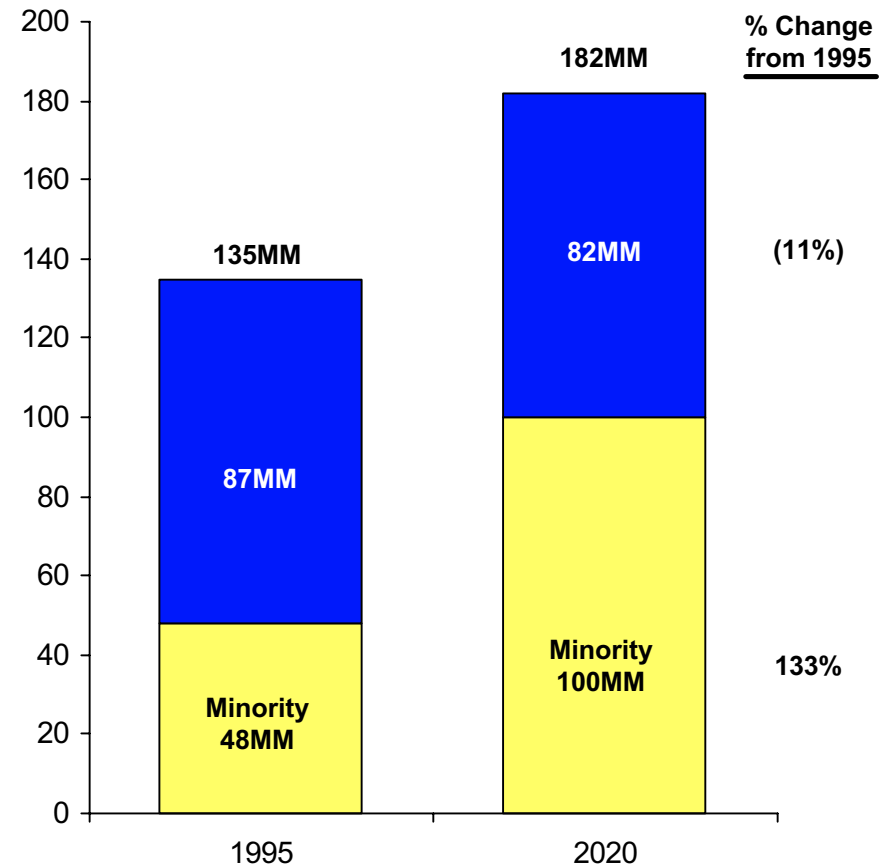
Changing Demographics Driving OEMs to Focus on Minority Consumers

13

U.S. Resident Population



Entry Level Car Buyer¹



Entry-Level Car Buyer Will Be More Multicultural

¹ Population under age 35
SOURCE: U.S. Census; MBDA Documentation;

Auto Manufacturers Leveraging Minority Sourcing Programs

Building Customer Loyalty with Minority Consumers

14

Added benefits derived from minority sourcing

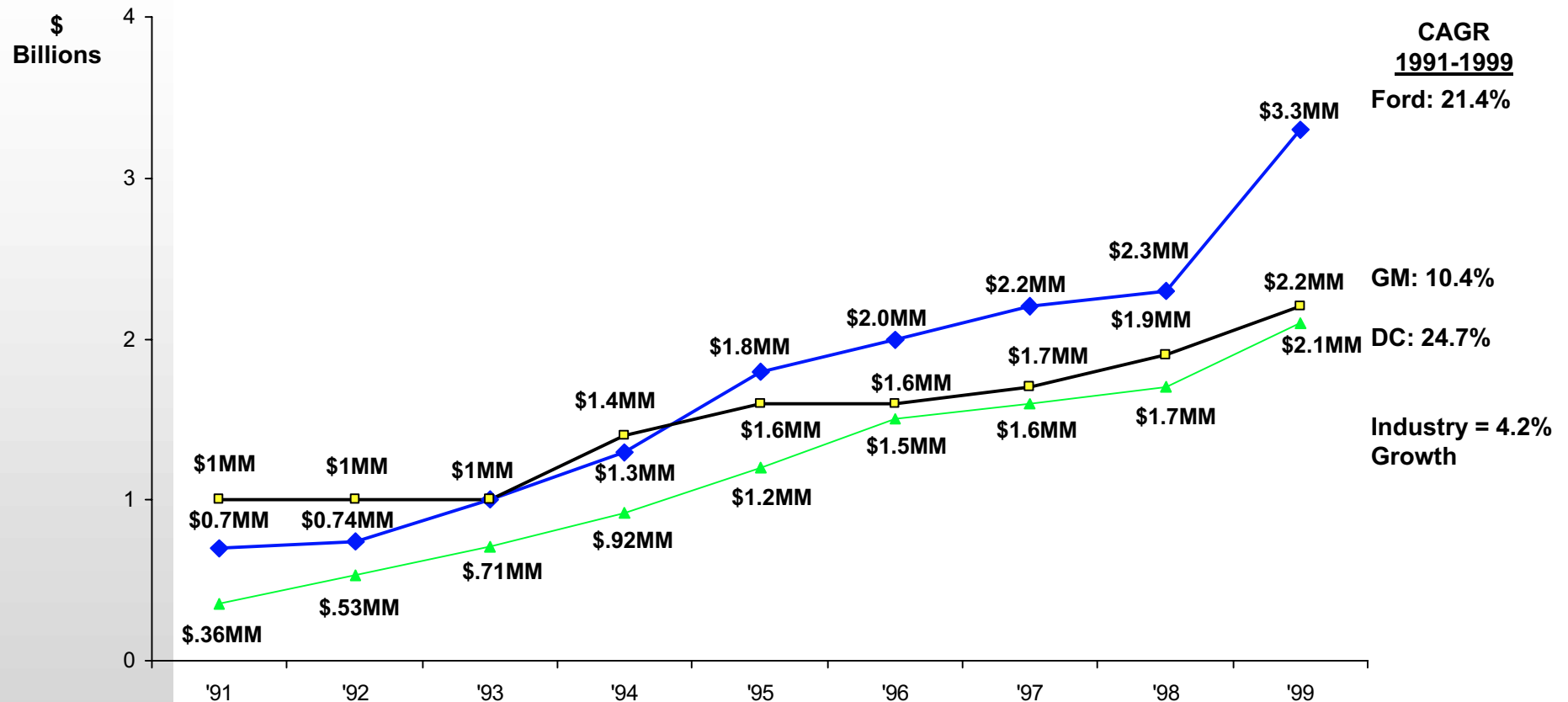
- Builds corporate links with minority communities
 - Necessary in building brand awareness with minority consumers
- Develops understanding of cultural differences
 - Enhances internal corporate diversity efforts
- Contributes to the economic growth of minority communities
- Provides an environment for corporate manager to learn the art of bridging cultural divides
 - A critical skill for success in emerging markets

Minority Sourcing Becoming a Strategic Imperative

Minority Purchasing Growing Faster Than U.S. Automotive Sales

15

Big Three Minority Supplier Purchases (1991-1999)

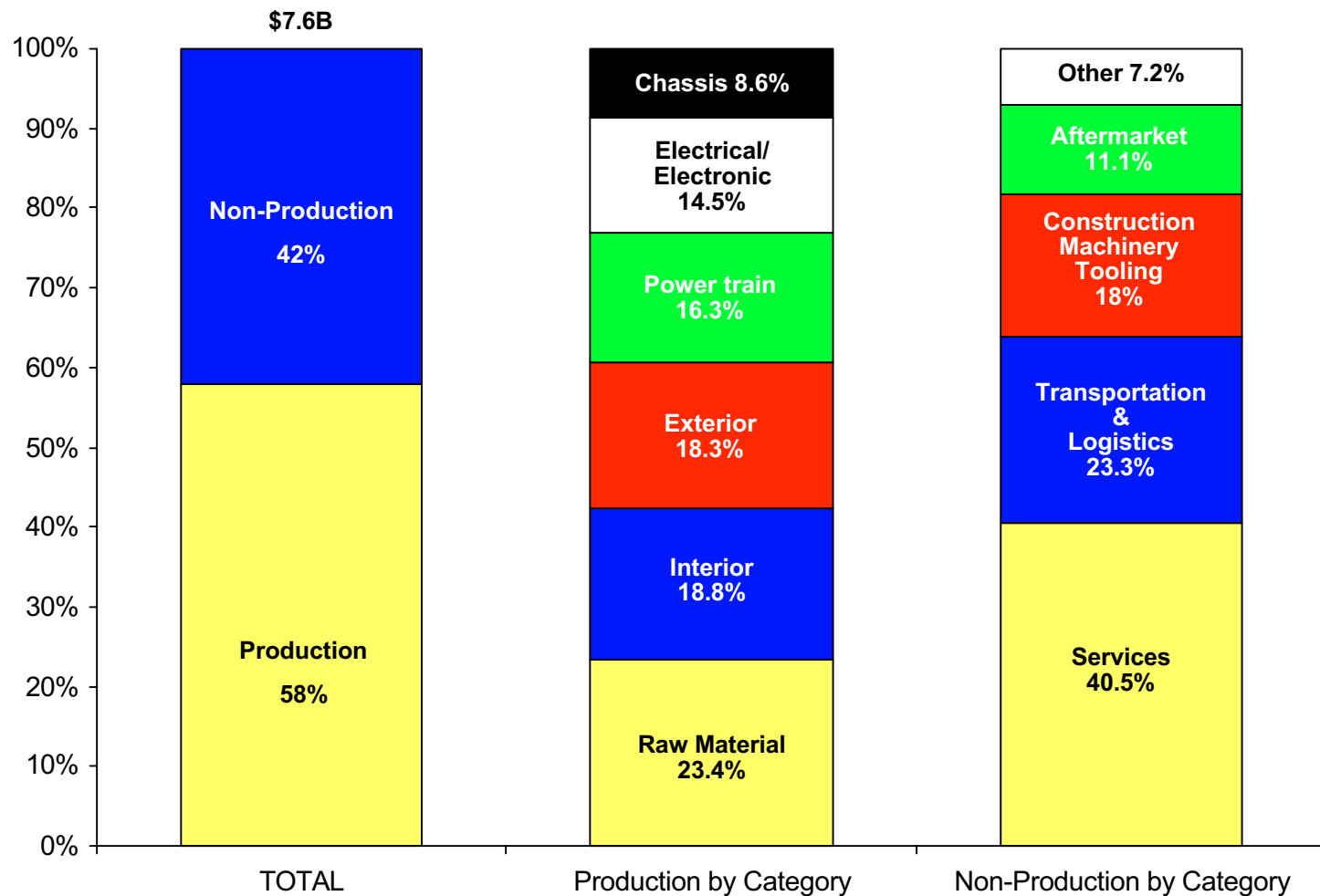


Big Three Committed to Minority Sourcing

SOURCE: Industry reports; company data; TAG analysis

1999 Minority Purchases by Commodity Groups

16



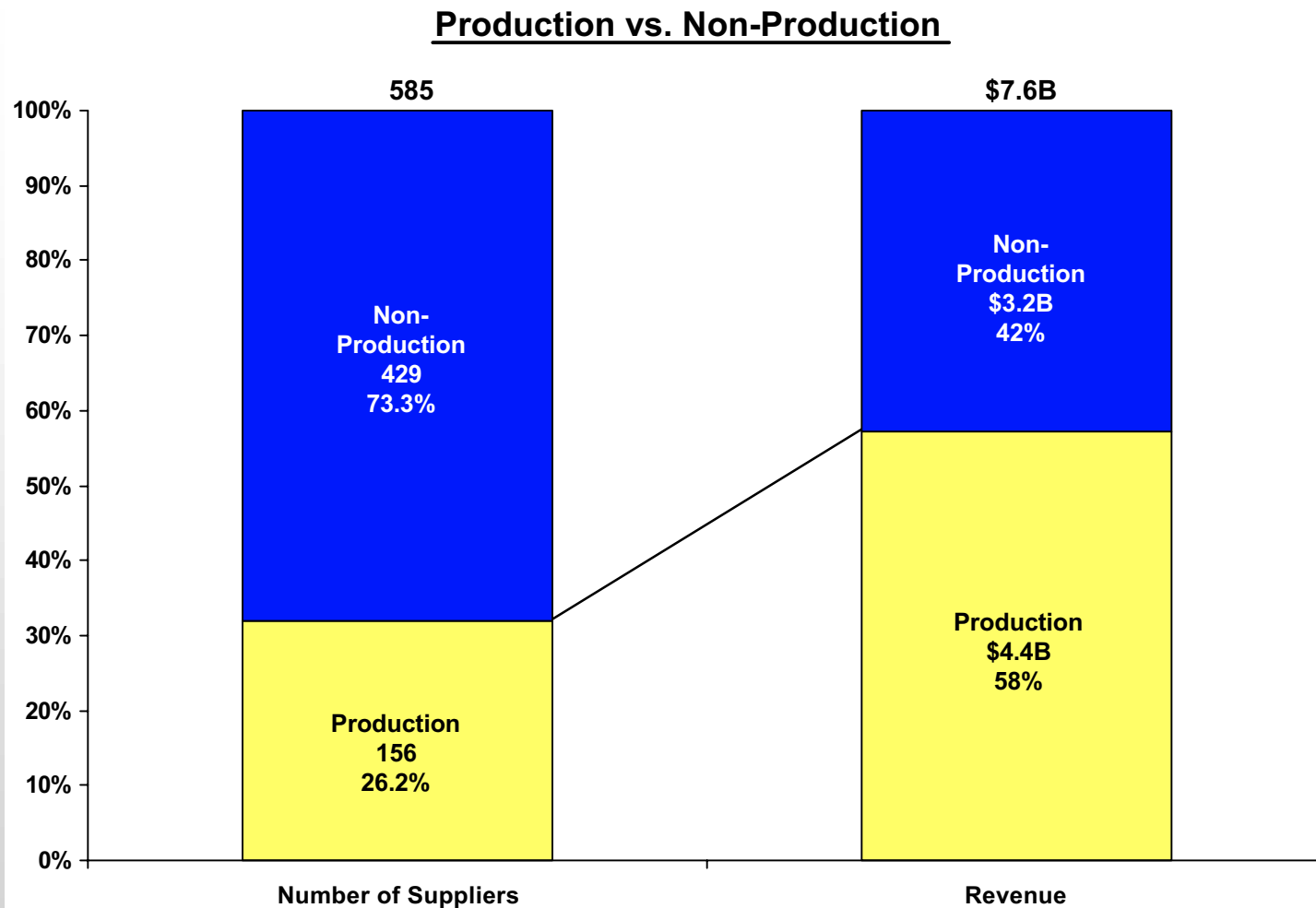
Spending Patterns Reflect The Availability of Minority Suppliers

NOTE: Sample of three auto manufacturers

Competitive Profile of Minority Suppliers

Most minority suppliers in non-production commodities

17

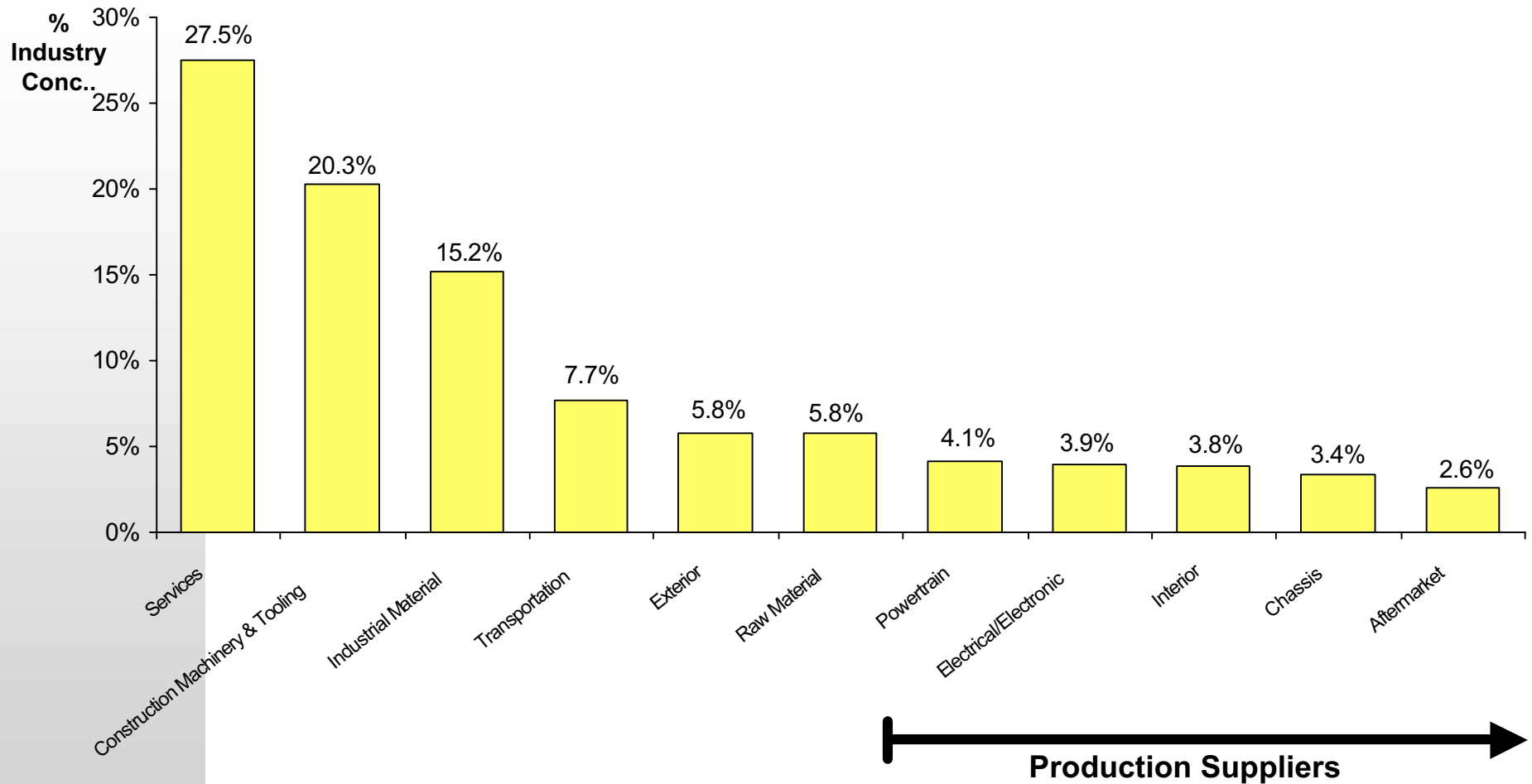


SOURCE: Asaba Group Analysis

Minority Business Concentrated On Non-Production Commodities

18

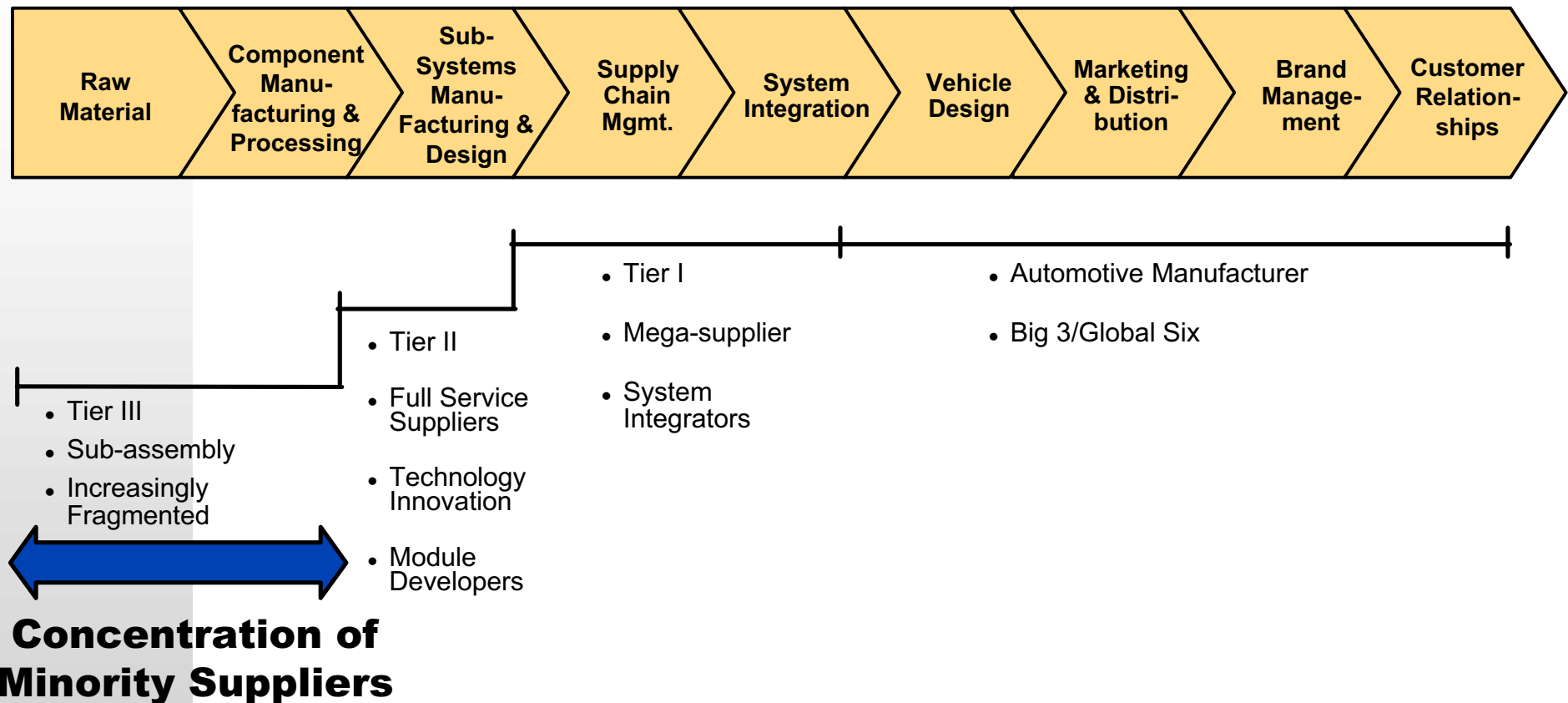
Minority Suppliers by Category

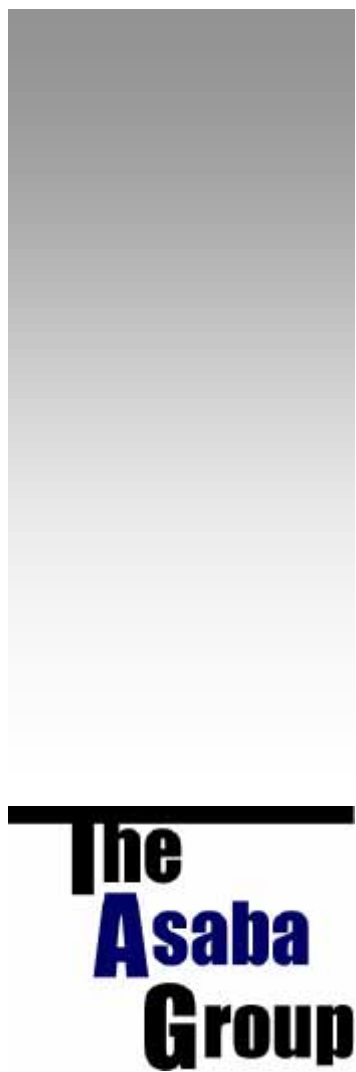


SOURCE: Industry reports; company data; TAG analysis

Concentration Of Minority Suppliers In The Value Chain

19





Content

STRATEGY AND BUSINESS IMPROVEMENT CONSULTING

Competitive Trends and Issues	3-11
State of Minority Sourcing	12-20
New Growth Imperatives	21-30
Growth Strategies and Business Structures	31-44
Appendix	45-47

Key Points: New Growth Imperatives

21

Growth and scale necessary for minority suppliers

- Drive reinvestments and cost competitiveness
- Growth and scale are mutually reinforcing

Growth should focus on larger Tier one and two suppliers

- New class of tier one suppliers have emerged - Mega-suppliers
- Larger suppliers will seek partners to provide low cost services

Deploying resources for growth and scale requires thinking beyond current tier structure

- Define players and strategic intent by role in the value chain

Size and scale of larger suppliers reveal correlation with capital structure and value chain role

Growth and Large Scale Imperative

Why Minority Suppliers Must Grow and Gain Scale

22

To generate the surplus needed for future investments in plants, research and development, etc.

Become attractive to financial community and attract additional growth capital

Allow increases in productivity without cutback in personnel

Generate higher economics of scale which increases in cost competitiveness

Create attractive career prospects for talented employees

- Enhance ability to recruit world class talents

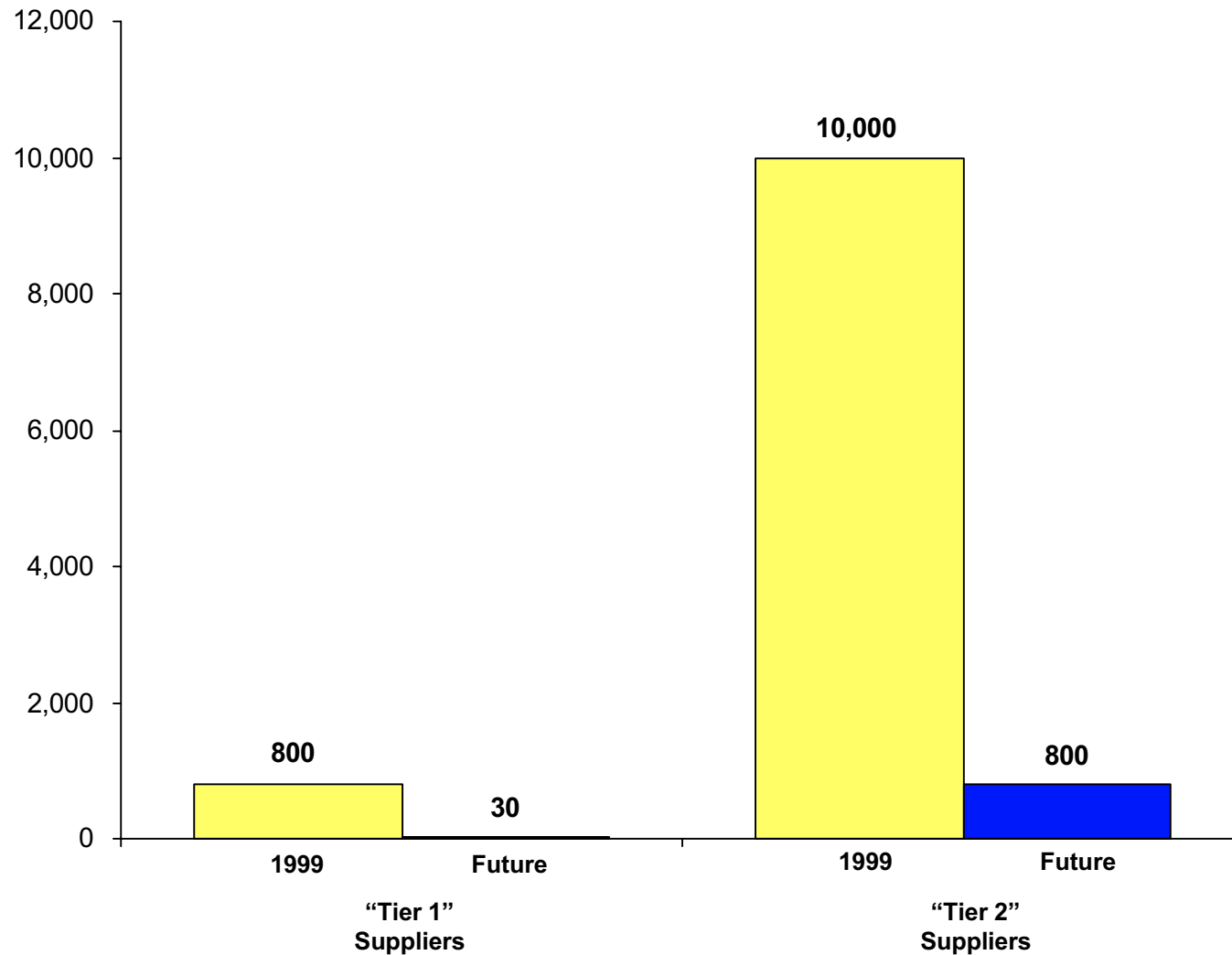
Scale enables the enterprise to mitigate disasters due to market and operating business risks

- Product recalls, environmental, etc.

With Supply Chain Consolidation and Evolving Value Chain

Growth Should Be Focused on the Bigger Tier 1 and 2 Suppliers

23



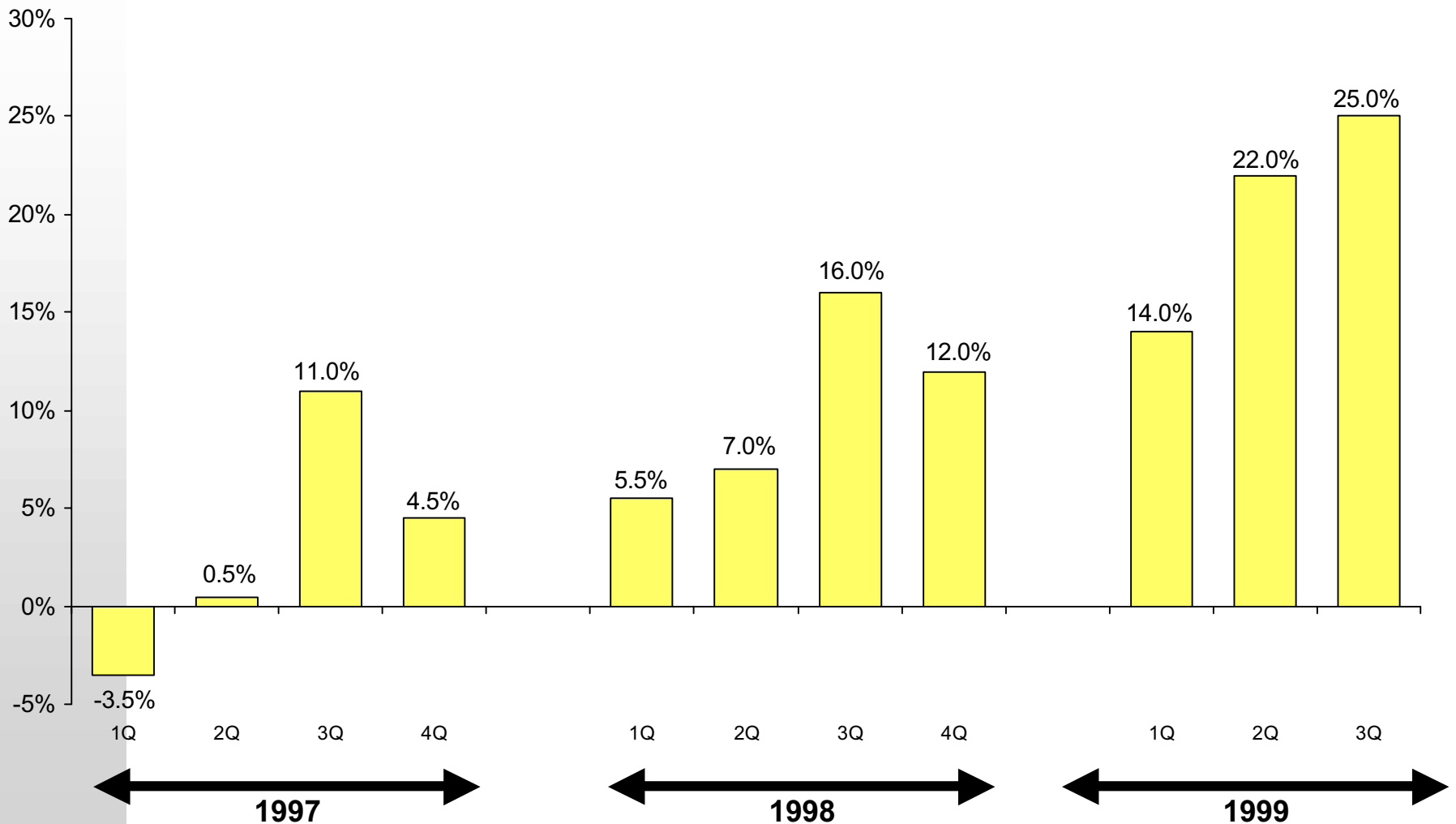
SOURCE: Price Waterhouse Coopers

Large Automotive Suppliers Are Growing Faster Than Industry

Driven by Mergers and Acquisitions

24

Index Revenues vs. North American Vehicle Sales



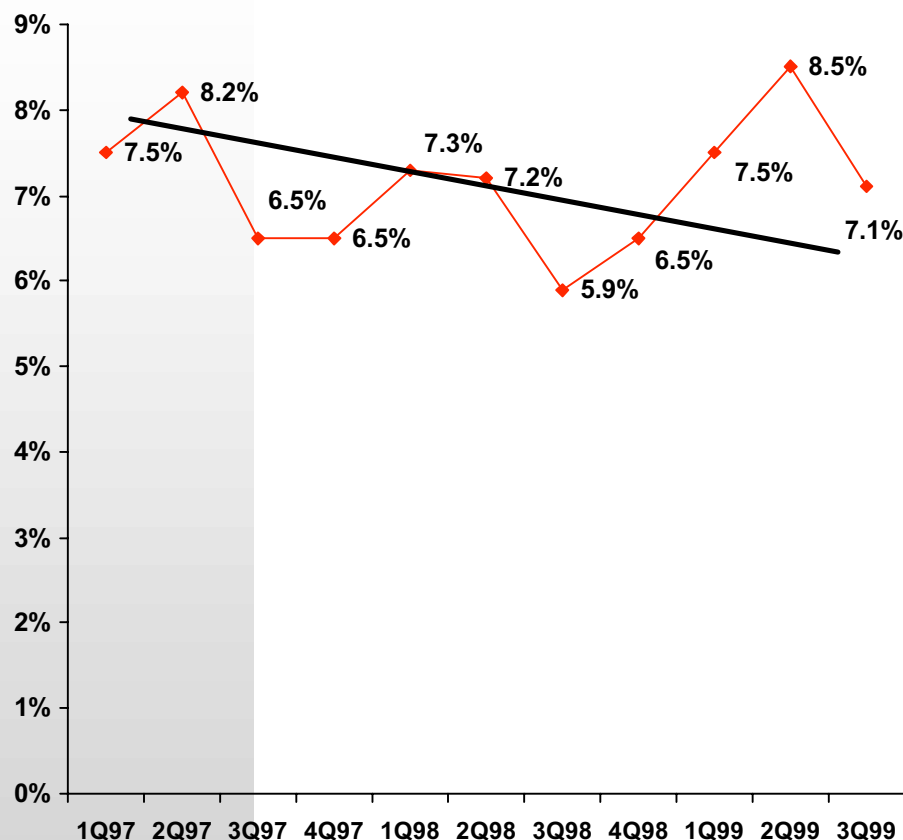
NOTE: See appendix for list of suppliers

SOURCE: Andersen Consulting

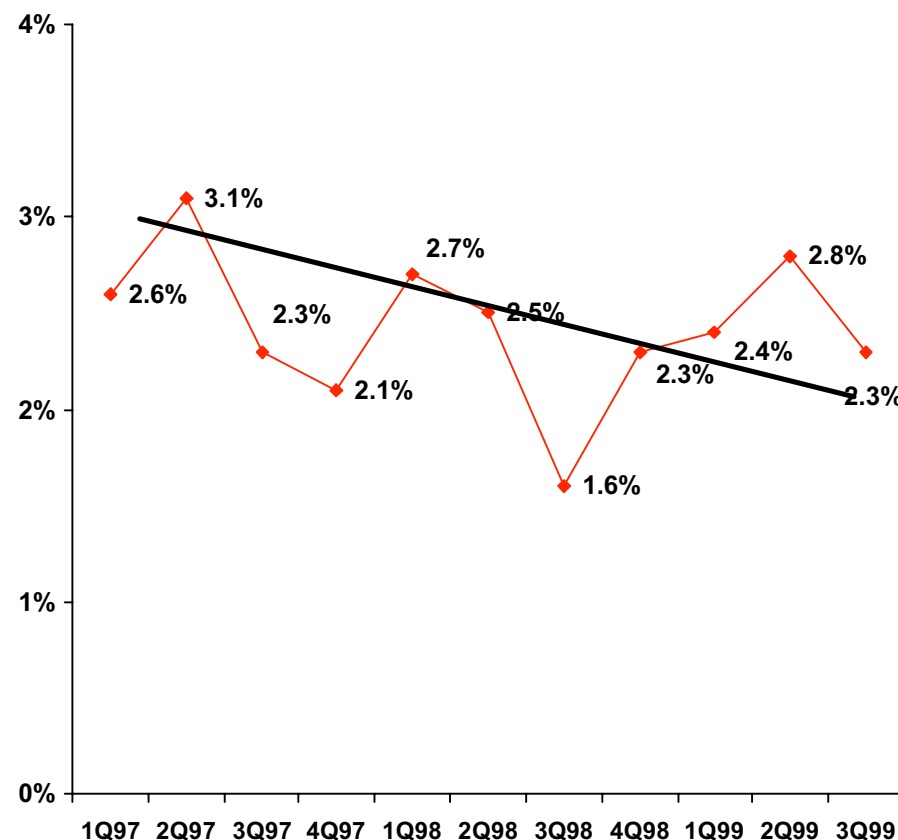
Declining Profitability Will Drive Large Suppliers To Seek Savings From Supply Chain

25

Average Return on Sales



Average Return on Assets

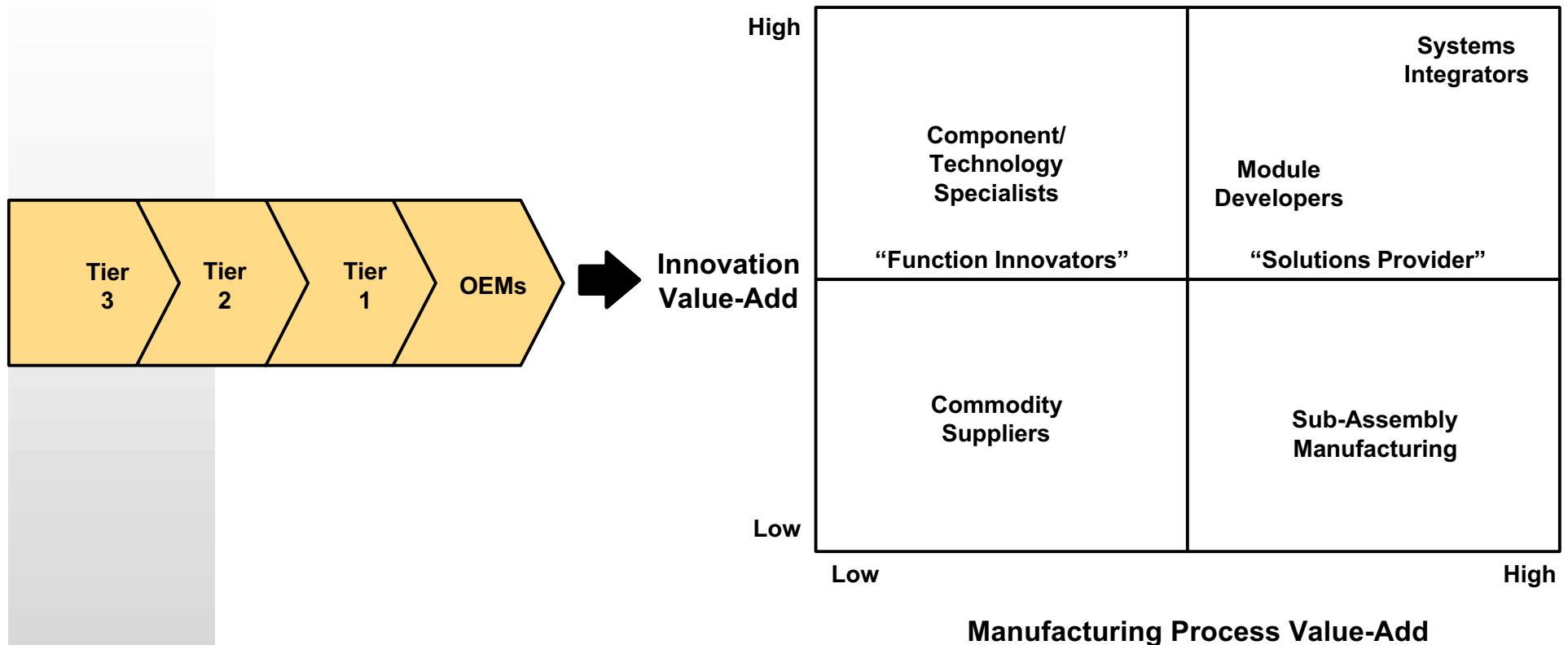


Expect More Outsourcing of Non-Core Activities And Lower Cost Procurement of Commodities

SOURCE: Andersen Consulting, Analyst reports, Annual and Quarterly reports, Asaba Group analysis

Beyond Tiers: Defining Strategic Position In An Evolving Value Chain

26



Each Strategic Position Requires Unique Set of Resources to Achieve Profitable Growth

Analysis of Automotive Suppliers Shows Size Correlation With Strategic Positioning

Sample of Largest Suppliers in Each Category (Auto Sales \$B)

27

System Integrators		Module Developers		Technology/ Component Specialists		Sub-Assembly Manufacturing		Commodity/ Basic Processing	
Delphi	27.3	Eaton	4.2	Dupont	5.0	Masco Tech	0.8	Meridian	0.3
Visteon	18.5	Meritor	4.6	Motorola	2.7	Guardian	0.9	Becker	0.3
Dana	10.1	Autoliv	3.8	Good Year	3.4	Linamar	0.7	Amcast	0.5
Lear	12.4	American Axle	2.9	Alcon Fujikura	2.1	Woodbridge	0.8	Gibb Diecasting	0.3
JCI	11.1	Cummins	3.2	Mitsubishi	3.0	Oxford	0.8	Global Metal	0.2
Magna	9.0	Valeo	7.7	Siemens	3.6	Shiloh	0.5	Ogihara	0.3
Robert Bosch	15.6	Textron	2.9	PPG Industries	2.0	Marmon	0.5	Metal Forming	0.3
TRW	11.0	Tower	2.2			Plastech	0.4	Foamex	0.4
Denso	12.6	Borg Warner	2.7			Saturn Electronic	0.4		
Average Size (\$B)		14.2		4.3		2.8		0.6	
								0.3	

SOURCE: Automotive News

Large Capitalization and Established Competencies

Characteristics of Large Automotive Suppliers

28

	System Integrators	Module Developers	Technology/ Component Specialists	Sub-Assembly Manufacturing	Commodity/ Basic Processing
Average Size (\$B)	14.2	4.3	2.8	0.6	0.3
Geographic Scope	Global	Global	Global	Regional	Regional/Local
Automotive Industry Concentration	High	High	Mid-Diversified	High-Mid	High
Capital Access (Ownership)	Public	Public	Public Division of Large Corp.	Private/Equity Investors	Private Closely Held
Established Competency	Mature	Mature	Mature	Early	Early
Key Competencies:	<ul style="list-style-type: none"> • Total solution - Customer focused • Supply Chain Management - Integration Capabilities 	<ul style="list-style-type: none"> • Functional solutions • Supply chain management - Sub-assemblies • Design for Assembly 	<ul style="list-style-type: none"> • Innovation/ applied technology 	<ul style="list-style-type: none"> • Component design • Lean manufacturing • JIT sequenced 	<ul style="list-style-type: none"> • Low cost manufacturing • Operational excellence

Summary of Key Points

29

Capital structure essential to becoming large

- Most large suppliers are public companies
- Minority suppliers who desire growth and scale need to access public capital markets

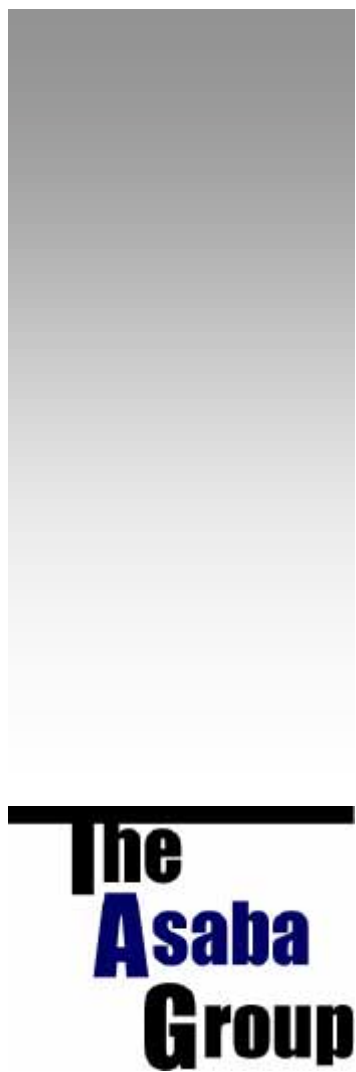
Supplier concentration and reconstruction of value chain creating mega-suppliers

- Minority suppliers should focus on growing with these suppliers

Defining strategic positioning will determine key value propositions for growing business with mega suppliers

Minority suppliers must read the “tea leaves” for growth opportunities

- “Go to where the puck is going to be”



Content

STRATEGY AND BUSINESS IMPROVEMENT CONSULTING

Competitive Trends and Issues	3-11
State of Minority Sourcing	12-20
New Growth Imperatives	21-30
Growth Strategies and Business Structures	31-44
Appendix	45-47

Key Points: Growth Strategies and Business Structures

31

Growth opportunities exist in new markets and products, outsourcing and forward integration

- Mature market environment requires new structures to take advantage of growth opportunities

Strategic alliances and collaboration with larger suppliers is essential to growing minority suppliers

Alliances are a win-win for all parties involved

- Cross industry studies show they are a significant source of revenues with high returns
- Alliances successes increase with experience

Minority suppliers must view alliances as a portfolio of options

- Level of collaboration should be a function of strategic intentions and enhancing competitiveness

Growth Opportunities for Minority Businesses

32

New Markets

Emerging markets driving long term growth

- Asia/Pacific region forecasted to contribute 42% of total vehicle production by 2006

Critical Mass

Increasingly fragmented commodity categories (plastic and metal processing)

- Economies of scale are basis of competition
- Potential for category consolidation or rollup platform

Product Portfolio

Navigation, comfort, safety and security, and drive train categories are fastest growing automotive segments

- Driven by new functionalities from electronic integration
- Most attractive: not a function of share losses from entrenched competitors

Forward Integration

Becoming full service suppliers with design, engineering and supply chain management capabilities

Outsourcing from Larger Suppliers

Taking on non-core activities from larger suppliers

Leverage ability to lower factor costs

Developing Internal Capabilities to Grow Requires Significant Investment

The Strategic Alliances Model Can Drive Growth While Reducing Downside Risks

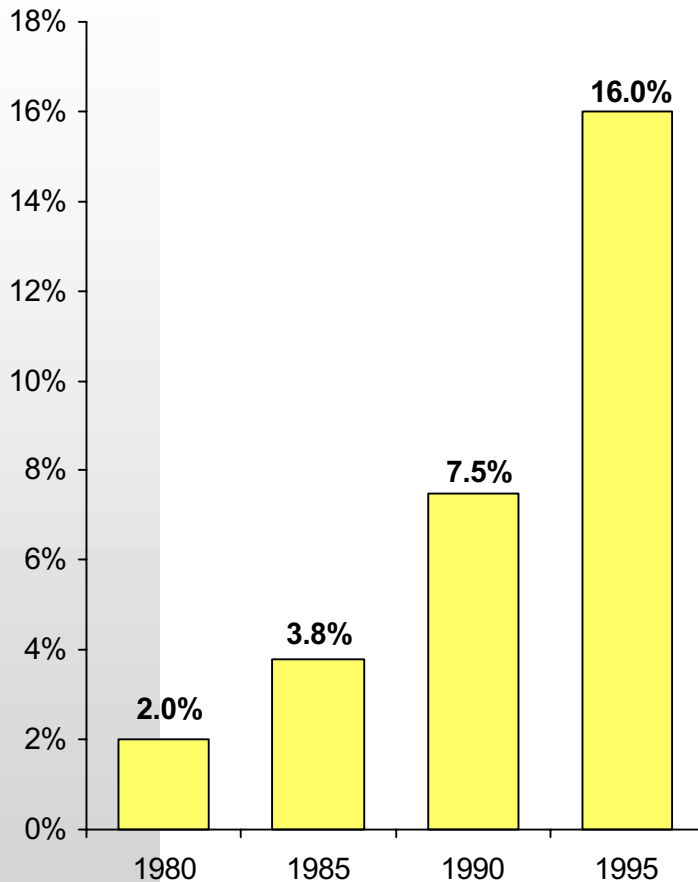
Successful Alliances Typically Consist of the Following:

- a win-win for all parties involved
- a common strategy with clearly defined goals
- reciprocal relationship with all partners contributing share of resources and sharing risks
- pooling of resources and risk sharing is for mutual gain

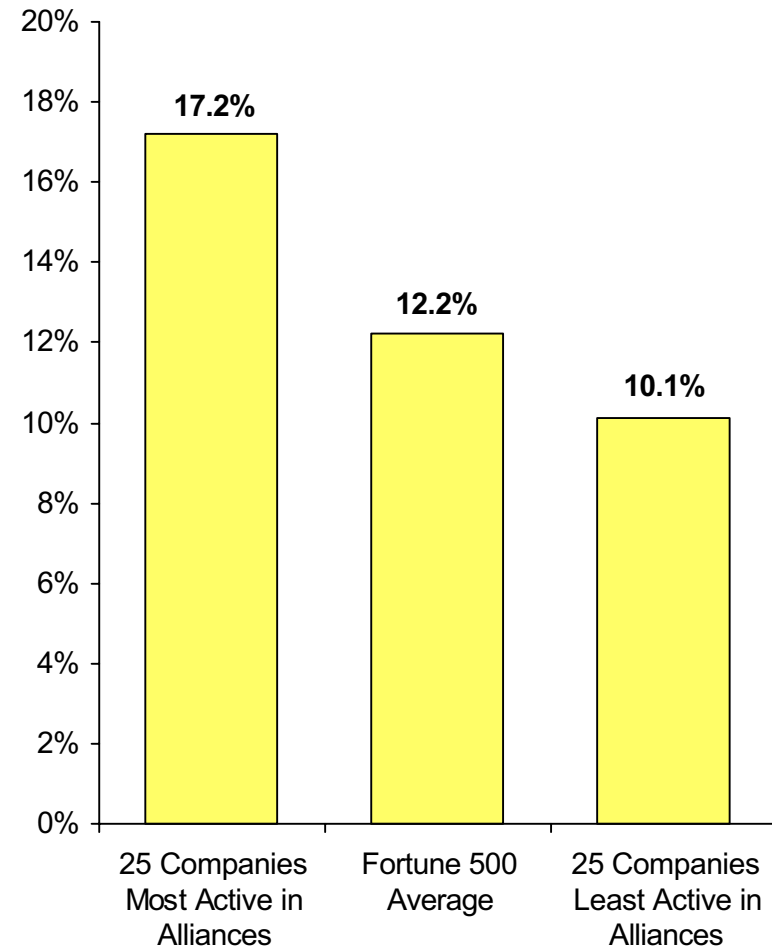
Strategic Alliances Are Good for Business

Growing as a Revenue Source with Higher Returns

Revenue From Alliances Top 1,000 U.S. Companies

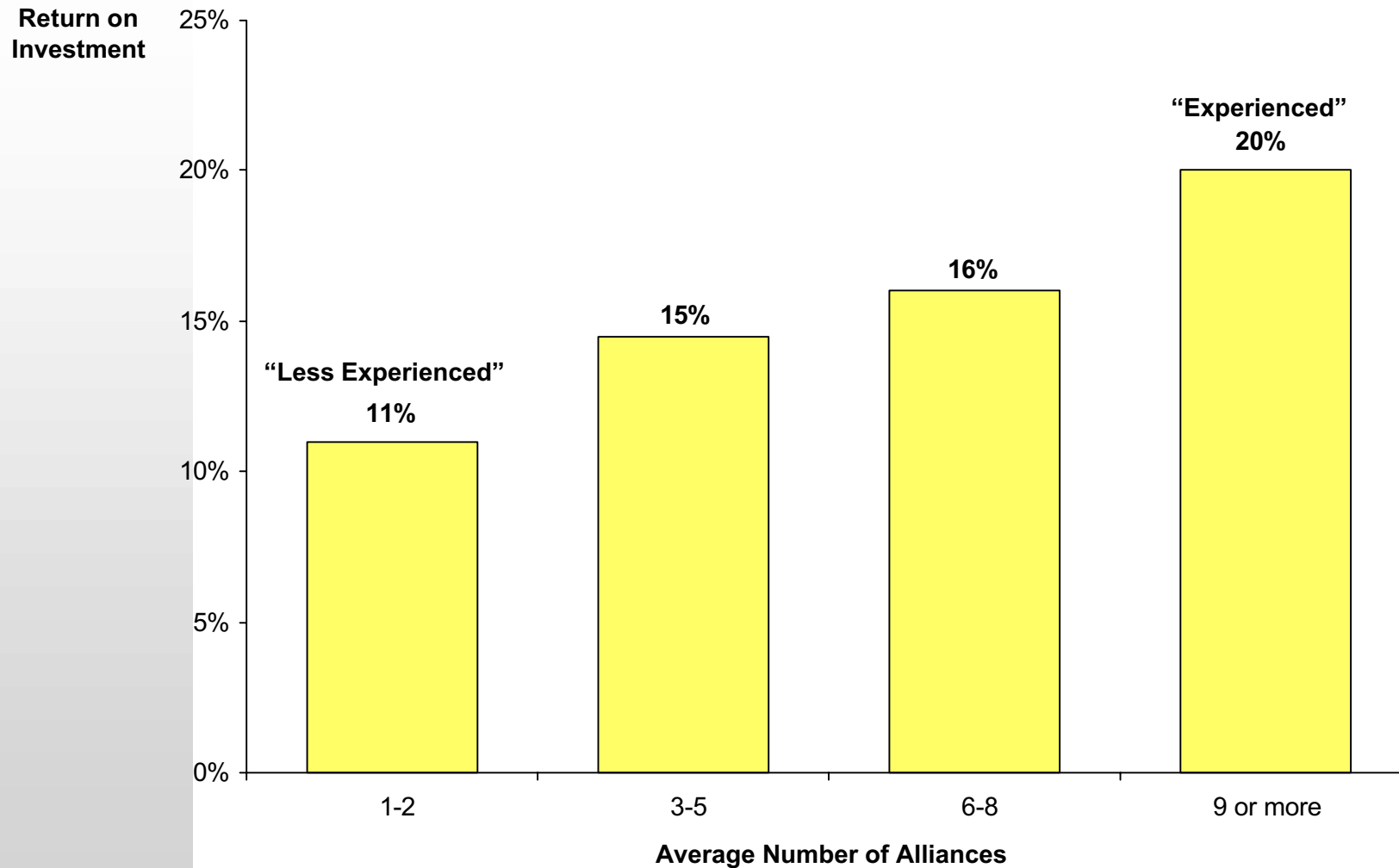


Return on Equity



Success Grows As Alliances Experience Increases

35



SOURCE: Booz-Allen & Hamilton; 1997 Survey of 700 Alliances

Strategic Alliances With MBEs Create Value

Beneficial for OEMs and Tier One Suppliers

36

	OEMS	Minority Business	Tier One Suppliers
Business Rationale	<ul style="list-style-type: none">• Leverage minority sourcing as key differentiation in marketplace• Develop essential cross-cultural capabilities	<ul style="list-style-type: none">• Build capabilities for new revenue sources• Lower facilities cost<ul style="list-style-type: none">- Labor and overhead	<ul style="list-style-type: none">• Lower cost• Improved JIT/supply chain management
Benefits	<ul style="list-style-type: none">• Grow market presence and brand with minority consumers• Minority sourcing compliance• Corporate citizenship	<ul style="list-style-type: none">• Achieve sustainable profitable growth• Wealth creation in minority communities	<ul style="list-style-type: none">• Better asset management• Extended enterprise of supply chain partners

Types of Strategic Alliances

37

Increasing in Ownership and Control

No Linkage	Shared Information	Shared Resources	Shared Equity	Strategic Investor	Wholly-Owned
------------	--------------------	------------------	---------------	--------------------	--------------

Examples

- | | | | | | |
|---|--|--|---|---|--|
| <ul style="list-style-type: none"> • Outsourcing relationships • Licensing technology • Exclusive manufacturing rights | <ul style="list-style-type: none"> • Manufacturing arrangement • Co-location of facilities | <ul style="list-style-type: none"> • Partnerships • Joint marketing arrangements | <ul style="list-style-type: none"> • Joint venture | <ul style="list-style-type: none"> • Strategic alliances with Specialist | <ul style="list-style-type: none"> • Acquisition - Divestitures from other forms • Consolidations • Mergers |
|---|--|--|---|---|--|

Characteristics

- | | | | | | |
|--|--|---|--|---|---|
| <ul style="list-style-type: none"> • Transactional • Transaction cost trade-offs | <ul style="list-style-type: none"> • Limited risk sharing | <ul style="list-style-type: none"> • New market propositions • May include new legal entities | <ul style="list-style-type: none"> • Specific to an opportunity • Matches specific strengths • Balance control with collaboration | <ul style="list-style-type: none"> • Long term • Aligned interest • Broader in scope | <ul style="list-style-type: none"> • Full control • Acquires both strengths and weaknesses • Integration risks |
|--|--|---|--|---|---|

Must Be Viewed As A Portfolio of Options

Minority Businesses Have Used Different Forms of Strategic Alliances to Grow

Structure of Alliance

Minority Business	No Linkage	Shared Information	Shared Resources	Shared Equity	Strategic Investor	Wholly-Owned
BING Group	<ul style="list-style-type: none"> Exterior mirror divestiture by Lear (\$50MM) 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Bing-Lear/LEAR - Interior components (\$102MM) Bing Blanking/ Rouge Steel 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Investor Group	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Bridgewater/JCI - Interior systems (\$900MM) 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Plastech	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> TrimQuest/ JCI Interior components 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
American Basic Industries	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Manufacturer Industrial Group/JCI (\$125MM) Outsourced seats components 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Piston Automotive	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> JL Automotive/ Lear Sequencing 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Saturn Elect. & Engineering	<ul style="list-style-type: none"> Technology Licensing (Bitron) 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Saturn LLC/ Lear - Electrical 	<ul style="list-style-type: none"> Motorola (On Star/Telematics) \$1B 	<ul style="list-style-type: none"> Smartflex acquisition - \$20MM (Diversification)
Scion/Devon/Gala	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Tri Tec (End to End Solutions) 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

Strategic Alliances Should Not Only Add Revenues But Build Capabilities

Critical Capabilities Differ With Value Chain Positioning

39

Value Chain Strategic Positions

Critical Capabilities	Commodity/ Processing Supplier	Sub-System/ Modular Assembly	Technology/ Component Specialist	Module Developers/ Solution	System Integrator
Technology Innovation	Low	Low	High	Med	Med
Economies of Scale	High	Med	Med	Med	Med
Production Efficiency/ Process (JIT) Capability	High	High	Med	Med	Med
Engineering Design/ Complexity Management	Low	Low	Med	High	High
Risk Sharing with OEM	Low	Low	Med	High	High
Supply Chain Management	Low	Med	Med	High	High
Project Management/ Understanding	Low	Low	Med	High	High
End Customer Need	Low	Low	Low	Med	High

Choices Must Enhance Critical Capabilities

Decision Framework for Strategic Alliances

Growth Options	Business Rationale	Commodity/ Processing Supplier	Sub-System/ Sub-Module Assembly	Component/ Technology Specialist	Module Developer/ Solutions
Building Critical Mass	<ul style="list-style-type: none"> Economies of Scale 	<ul style="list-style-type: none"> Acquisitions 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> ---
New Markets	<ul style="list-style-type: none"> Geographic 	<ul style="list-style-type: none"> Joint venture 	<ul style="list-style-type: none"> Joint venture 	<ul style="list-style-type: none"> Joint venture 	<ul style="list-style-type: none"> Joint venture
	<ul style="list-style-type: none"> New Products 	<ul style="list-style-type: none"> Joint venture Acquisition 	<ul style="list-style-type: none"> Joint venture 	<ul style="list-style-type: none"> Acquisition 	<ul style="list-style-type: none"> Acquisition
Forward Integration	<ul style="list-style-type: none"> New capabilities 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> Joint venture Shared resources
Building New Competencies	<ul style="list-style-type: none"> New technologies New applications 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> Strategic Investor 	<ul style="list-style-type: none"> Strategic Investor

Some Concerns With Today's Minority Alliances

41

Business tends to be non-core to majority partners

- What happens when there is a shift in strategic focus with majority partners

Some relationships appear not to fit a coherent strategy for the MBEs

- Issue with “quality of revenues” versus absolute revenues
- Lowering factor costs versus building long term sustainable competencies

To achieve hyper growth for MBE

- More alliances from “transaction cost boundaries” – outsourcing
- Developing capabilities/technologies that drive commodity growth

Illustrative Example: Hypothetical Company

42

TODAY	INCREMENTAL REVENUE	STRATEGIC ALLIANCE	BUSINESS RATIONALE
\$100MM	\$100MM	<ul style="list-style-type: none"> Acquisition of competitor 	<ul style="list-style-type: none"> Build critical mass/achieve economies of scale
	\$200MM	<ul style="list-style-type: none"> Partnership with engineering company 	<ul style="list-style-type: none"> Develop full service capabilities (design/engineering/prototype) <ul style="list-style-type: none"> 100MM contract for module delivery
	\$200MM	<ul style="list-style-type: none"> Joint venture in South America 	<ul style="list-style-type: none"> Tier one customer growing in emerging market <ul style="list-style-type: none"> Joint venture with local partner Local content requirement
	\$400MM	<ul style="list-style-type: none"> Strategic investor 	<ul style="list-style-type: none"> Sold 30% stake to global multinational technology innovator <ul style="list-style-type: none"> Access to emerging technologies with automotive applications \$400MM contract for new products
	<u>\$200MM</u>	<ul style="list-style-type: none"> Joint venture in Asia 	<ul style="list-style-type: none"> Tier one customer growing in Asia
FUTURE	\$1200MM		

Supplier Index: Methodology

43

Metrics

- Operating return on assets (ROA)
- Operating return on sales (ROS)
- Rolling twelve-quarter average revenue growth rate

Index Companies

- Largest 20 North American Tier Ones
- Clearly segmented automotive operations
- Publicly-traded
- Performance from Q1 1997 through Q3 1999

Supplier Index: Companies

- Autoliv
- Arvin Industries
- American Axle and Manufacturing
- Borg-Warner Automotive
- Collins & Aikman Corporation
- Cummins Engine Company
- Dana Corporation
- Delphi Automotive Systems
- Hayes Lemmerz International
- Federal-Mogul Corporation
- Goodyear Tire & Rubber Company
- Johnson Controls
- Lear Corporation
- Magna International
- Meritor International
- Tenneco Automotive
- TRW
- Tower Automotive
- Textron